From: "Mathieus, George" <gemathieus@mt.gov>
To: Tina Laidlaw/MO/R8/USEPA/US@EPA

Date: 07/26/2012 01:18 PM

Subject: FW: non-deg

From: Douglas Parker [mailto:DParker@hydrometrics.com]

Sent: Wednesday, July 25, 2012 10:10 PM

To: Mark Lambrecht; Mathieus, George; Brian Sugden

Subject: non-deg

Attachment 7

Indiana Water Quality Coalition Issue Paper – Antidegradation Rulemaking Exemption for Discharges that have been Granted Variances
Discharges that have been granted variances should not also be required to submit an antidegradation demonstration because the application and review process for obtaining a variance is substantially the same as the antidegradation demonstration and review process.

The antidegradation rule should include provisions specifying that antidegradation review is not required for agency-approved variances, including variances from water quality standards, 316(a) thermal variances, and other variances authorized by the Clean Water Act. Water quality standard variances: The Indiana water quality rules authorize dischargers to apply for a variance from a water quality standard used to derive a water quality-based effluent limitation contained in a NPDES permit for a specific substance. See 327 IAC 2-1-8.8 (non-Great Lakes basin) and 327 IAC 2-1.5-17 (Great Lakes basin). Indiana has also adopted a rule authorizing a streamlined mercury variance. See 327 IAC 5-3.5. All water quality standards variance applications must review the types of technology capable of treating the pollutant of concern, as well as the social and economic costs of installing and operating each type of technology. This review is very similar to the technology review and demonstration of social or economic importance that is required for antidegradation review. In fact, U.S. EPA recommends that states use the same process for reviewing social and economic impacts for variances and antidegradation review. See Interim Economic Guidance for Water Quality Standards Workbook, EPA 823/B-95-002 (March 1, 1995). Thus, if IDEM has granted a variance to a discharger, the discharger should not also need to complete an antidegradation demonstration. The antidegradation rule should contain an exemption for discharges that have been granted water quality standards variances.

316(a) thermal variances: Section 316(a) of the Clean Water Act authorizes variances from a state's temperature criteria in cases where a discharger demonstrates that the thermal discharge "will assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on that body of water." Such demonstrations are significant undertakings involving detailed biological studies; additional information about the 316(a) thermal variance demonstration process is attached to this issue paper. The draft antidegradation rule contains the following provision concerning such thermal variances:

Except for ONRWs, any determination made by the commissioner in accordance with Section 316 of the Clean Water Act concerning alternative thermal effluent limitations shall be considered to be consistent with the antidegradation standards contained in this section.

Draft 327 IAC 2-1.3-3(e). The Coalition supports this provision, but recommends that the introductory clause excepting Outstanding National Resource Waters be deleted. 316(a) variances should apply to all tiers of waters, consistent with U.S. EPA's long-standing position that Section 316 takes precedence over other requirements of the CWA. See Questions & Answers on Antiegradation #29, p. 15 (available at

http://www.epa.gov/waterscience/standards/library/antidegqa.pdf). Attachment 7

Other CWA variances/modifications: Section 301 of the Clean Water Act authorizes several other types of variances and modifications that are similar in nature and effect to the water quality standards variances or 316(a) variances discussed above. For example, CWA 301(g) allows for modifications to certain nonconventional pollutants. See 33 U.S.C. § 1311(g). This provision specifies several requirements for demonstrating the necessity of the modification, including the following:

[S]uch modification will not interfere with the attainment or maintenance of that water quality which shall assure protection of public water supplies, and the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities, in and on the water and such modification will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities.

33 U.S.C. § 1311(g)(2)(C). For the same reasons provided above on other types of variances, these CWA Section 301 variances should also be exempt from antidegradation review, because the process used to evaluate and grant these variances is substantially similar to the antidegradation review process.

From EPA nutrient criteria web-page: How do nutrient criteria relate to antidegradation procedures? This question is not entirely specific to nutrients and, therefore, is answered the same as for any other water quality criteria. States have existing antidegradation policies and procedures, which must be followed for nutrient criteria. States may modify their procedures at their discretion to address new/increased loadings of nutrients.

http://www.tceq.state.tx.us/assets/public/legal/rules/rule_lib/adoptions/RG-194.pdf

TEXAS RULES (http://www.tceq.state.tx.us/assets/public/legal/rules/rule_lib/adoptions/RG-194.pdf): The antidegradation policy applies to actions regulated under state and federal authority that would increase pollution of water in the state. The antidegradation implementation procedures in this document apply to any increase in pollution authorized by TPDES wastewater discharge permits or by other state and federal permitting and regulatory activities.

Increases in pollution are determined by: (1) information on effluent characteristics that are provided in the application for the TPDES permit, the draft permit, and/or in other available sources; and (2) final effluent limits for flow, loading, and concentration in the previous permit compared with the proposed permit. Permits that are consistent with an approved WLE or TMDL under the antidegradation policy do not receive a separate antidegradation review for the applicable parameters unless the discharge may cause impacts on the receiving water that were not addressed by the WLE or TMDL.

Existing Discharges

Increases in permitted loading of less than 10% over the loading allowed by the existing discharge permit are usually not considered to constitute potential degradation if: (1) the increase will attain all water quality standards, (2) the aquatic ecosystem in the area is not unusually sensitive to the pollutant of concern, and (3) the discharge is not relatively large.

New Discharges

New discharges that use less than 10% of the existing assimilative capacity of the water body at the edge of the mixing zone are usually not considered to constitute potential degradation as long as the aquatic ecosystem in the area is not unusually sensitive to the pollutant of concern. New discharges that use 10% or greater of the existing assimilative capacity are not automatically presumed to constitute potential degradation but will receive further evaluation. For constituents that have numerical criteria in the water quality standards, the following equation may be used to estimate changes in assimilative capacity: where:

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